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CDKN2A Antibody

CDKN2A: cyclin-dependent kinase inhibitor 2A, CDK4 inhibitor, MTS1, p16(INK4A)

CATALOG No.:4211

BACKGROUND:

The CDKN2A locus gives rise to 2 distinct transcripts from different promoters. The transcripts have been designated p16(INK4A) and p14(ARF) (1). This chromosomal region undergoes a number of inversions, translocations, heterozygous deletions, and homozygous deletions in a variety of malignant cell lines including those from glioma, non-small cell lung cancer, leukemia, and melanoma. Deletion of the region containing CDKN2A is found in more than half of all melanoma cell lines (2). Conversely, transfection of CDKN2A suppressed the growth of two independent mesothelioma cell lines, suggesting that inactivation of the CDKN2 gene is an essential step in the etiology of malignant mesotheliomas (3). CDKN2A induces a G1 cell cycle arrest by inhibiting the phosphorylation of the Rb protein by the cyclin-dependent kinases CDK4 and CDK6 (4). CDKN2A is expressed as at least three distinct isoforms.

SOURCE:

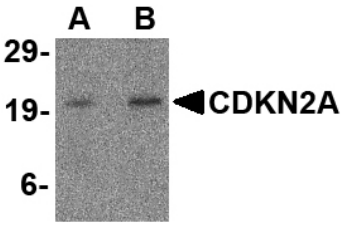
Rabbit polyclonal CDKN2A antibody was raised against an 18 amino acid peptide from near the amino terminus of human CDKN2A (GenBank accession no. NP_000068).

APPLICATION:

CDKN2A antibody can be used for detection of CDKN2A by Western blot at 1 – 2 µg/ml. (Optimal dilution should be determined by user.) Mouse colon tissue lysate can be used as positive control. CDKN2A antibody is human, mouse and rat reactive. **For research use only.**

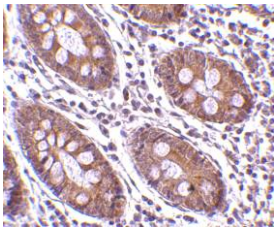
STORAGE:

CDKN2A antibody is supplied as immunoaffinity purified IgG in PBS containing 0.02% sodium azide. Store at 4˚C, stable for one year.



Western blot analysis of CDKN2A in mouse colon tissue lysate with CDKN2A antibody at (A) 1 and (B) 2 µg/ml.

Immunohistochemistry of CDKN2A in human colon tissue with CDKN2A antibody at 10 µg/ml.



RELATED PRODUCTS:

Blocking Peptide, Catalog No. **4211P.**
Mouse Colon Tissue Lysate, Catalog No. **1411.**
ARF-BP1 Antibody, Catalog No. **4213.**

REFERENCES:

1. Stone S, Jiang P, Dayananth P, et al. Complex structure and regulation of the p16(MTS1) locus. *Cancer Res.* 1995; 55:2988-94.
2. Kamb A, Shattuck-Eidens D, Eeles R, et al. Analysis of the p16 gene (CDKN2) as a candidate for the chromosome 9p melanoma susceptibility locus. *Nature Genet.* 1994; 8:22-6.
3. Kratzke RA, Otterson GA, Lincoln CE, et al. Immunohistochemical analysis of the p16(INK4) cyclin-dependent kinase inhibitor in malignant mesothelioma. *J. Nat. Cancer Inst.* 1995; 87:1870-5.
4. Stott FJ,; Bates S, James MC, et al. The alternative product from the human CDKN2A locus, p14(ARF), participates in a regulatory feedback loop with p53 and MDM2. *EMBO J.* 1998; 17:5001-14.
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